

Vladimir GROUZDEV, *et al.*  
Serial No. 10/566,274  
March 25, 2010

### **REMARKS/ARGUMENTS**

Reconsideration of this application is respectfully requested.

The rejection of claims 1-3, 6-8, 11, 12, 15, 18, 19 and 21-23 under 35 U.S.C. §102 as allegedly anticipated by Yodaiken '424 is respectfully traversed.

As will be explained in more detail below, the Examiner's interpretation of Yodaiken is believed to be clearly erroneous insofar as an attempt has been made to demonstrate anticipation of applicant's claims. Nevertheless, some claims have been amended in an effort to make this error even more clearly apparent.

Claims 1 and 21 have been amended to recite that the first operating system comprises a transmission scheduler arranged to selectively enable the first operating system or the second operating system to transmit data via the network interface, thereby to allocate transmission capacity between the two operating systems. This amendment finds a clear basis, for example, on page 13, lines 16-20 of the specification. Independent claim 23 has analogous recitations at the "selectively enabling..." element. Independent claim 18 analogously requires forwarding to the second operating system those packets that are not specifically for use by the first operating system.

The Examiner asserts that Yodaiken discloses a transmission scheduler to selectively enable the first operating system and the second operating system to transmit data via the network interface. In doing so, the Examiner has referred to the event handlers and queues shown in Figs. 1 and 2 and described at 6:60-67, 7:1-8 and 8:16-58 of Yodaiken.

The Examiner is believed to be mistaken. The event handlers 112/212 (Fig. 1/Fig. 2) do not perform any scheduling function. In particular, the event handlers are invoked after device 130 receives a data packet from network 170 or when network device 130 transmits a data packet onto network 170 (8:16-31). There is simply no suggestion in Yodaiken that the event handlers perform any scheduling function.

Likewise, the threads 113/123 (Fig. 1/Fig. 2) perform fail-over monitoring and TCP monitoring (8:3-31). Again, there is no suggestion that the threads perform any scheduling function in Yodaiken.

As a consequence, there is no suggestion of the feature that the first operating system comprises a transmission scheduler arranged to selectively enable the first operating system or the second operating system to transmit data via the network interface, thereby to allocate transmission capacity between the two operating systems, as explicitly required by claims 1 and 21. Clearly, none of the elements included in the

supervisory operating system in Yodaiken – possibly corresponding to the first operating system of applicant's claim 1 – performs such function.

Fig. 3 of Yodaiken illustrates a process performed by the Virtual Network Driver VND 120 of the secondary operating system when a protocol stack 150 generates a packet for transmission. In this process, the data packet is first placed in transmission queue 225 in the secondary operating system. If there is room in transmission queue 235 in the supervisory operating system, the data packet is moved from the transmission queue 225 to the transmission queue 235. Otherwise, the data packet is discarded (if it is non-critical) or an iteration is started until the data packet can be moved from the transmission queue 225 to the transmission queue 235 (if it is labelled "critical").

Accordingly, Yodaiken's VND 120 of the secondary operating system performs no scheduling function in the sense of allocating transmission capacity between the supervisory and the secondary operating systems, as required by applicant's claims. Instead, Yodaiken's VND 120 is arranged to move packets from the transmission queue 225 of the secondary operating system to the transmission queue 235 of the supervisory operating system whenever possible, i.e., when there is a gap in the transmission of data packets by the supervisory operating system. Clearly, this is different from a scheduling function to select one of the operating systems for transmission while

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disabling transmissions by the other operating system, i.e., to allocate dedicated communication channels between either the first or the second operating system and the external network.

In any case, the element that performs the process of Fig. 3 in Yodaiken, namely, the VND 120, is provided in the secondary operating system, while the applicant's claimed invention requires a transmission scheduler (or analogous function) provided in the first (supervisory) system.

Given the fact that Yodaiken fails to teach or suggest the critical scheduling features of all independent claims 1, 18, 21 and 23, it is not necessary at this time to detail additional deficiencies of this reference with respect to other aspects of the rejected claims. Suffice it to note that, as a matter of law, it is impossible to support a *prima facie* case of anticipation unless a single cited prior art reference teaches each and every feature of all rejected claims.

The rejection of claim 13 under 35 U.S.C. §103 as allegedly being made "obvious" based on Yodaiken in view of Ratcliff '438 is also respectfully traversed.

Fundamental deficiencies of Yodaiken already noted above with respect to a parent claim are not supplied by Ratcliff. Accordingly, it is not necessary at this time to detail additional deficiencies of this allegedly "obvious" combination of references with respect to other aspects of this rejected claim. Suffice it to note that, as a matter of law,

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it is not possible to support even a *prima facie* case of “obviousness” unless the cited prior art at least collectively teaches or suggests each and every feature of the rejected claim.

For similar reasons, the rejection of claim 16 under 35 U.S.C. §103 as allegedly being made “obvious” based on Yodaiken in view of Tanenbaum is also respectfully traversed. Once again, Tanenbaum is not even alleged by the Examiner to supply the above-noted deficiencies of Yodaiken.

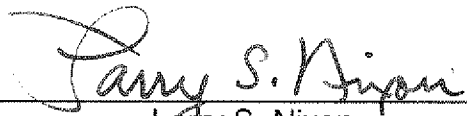
Finally, the rejection of claim 17 under 35 U.S.C. §103 as allegedly being made “obvious” based on Yodaiken in view of Han ‘564 is also respectfully traversed. Once again, the Han reference fails to teach or suggest the above-noted deficiencies of Yodaiken with respect to a parent claim. Accordingly, it is not necessary at this time to detail additional deficiencies of this allegedly “obvious” combination of references with respect to the additional aspects of claim 17.

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Accordingly, this entire application is now believed to be in allowable condition,  
and a formal notice to that effect is earnestly solicited.

Respectfully submitted,

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